

PCT

WORLD INTELLECTUAL PROPERTY ORGANIZATION
International Bureau

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁶ : C12N 15/82, 15/29, 5/10	A2	(11) International Publication Number: WO 99/66057 (43) International Publication Date: 23 December 1999 (23.12.99)
(21) International Application Number: PCT/GB99/01949 (22) International Filing Date: 21 June 1999 (21.06.99) (30) Priority Data: 9813345.7 19 June 1998 (19.06.98) GB (71) Applicant (for all designated States except US): BIOGEMMA UK LIMITED [GB/GB]; 200 Science Park, Milton Road, Cambridge CB4 0GZ (GB). (72) Inventors; and (75) Inventors/Applicants (for US only): DRAPER, John [GB/GB]; University of Wales, Institute of Biological Sciences, Ed- ward Llwyd Building, Aberystwyth SY23 3DA (GB). KEN- TON, Paul [GB/GB]; University of Wales, Institute of Bi- ological Sciences, Edward Llwyd Building, Aberystwyth SY23 3DA (GB). PAUL, Wyatt [GB/GB]; Biogemma UK Limited, 200 Science Park, Milton Road, Cambridge CB4 0GZ (GB). (74) Agents: CHAPMAN, Paul, William et al.; Kilburn & Strode, 20 Red Lion Street, London WC1R 4PJ (GB).		(81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG). Published <i>Without international search report and to be republished upon receipt of that report.</i>
(54) Title: INDUCIBLE PROMOTERS		
(57) Abstract <p>The present invention relates to inducible promoters for use in the control of heterologous genes in transformed plants. Suitable inducible promoters are those which are responsive to low levels of an environmentally acceptable and non-phytoxic inducing agent, and which also demonstrates a low level of developmentally or environmentally induced expression. A preferred promoter naturally drives the expression of a 21.3kDa protein in <i>Asparagus officinalis</i> or an equivalent protein from the <i>Lillaceae</i> or <i>Amaryllidaceae</i> families. Under the control of a promoter of the invention, a gene will be expressed upon induction by SA or BTH, but preferably will not be developmentally expressed, systemically activated upon pathogen infection, or in response to ABA, ethylene, oxidative or osmotic stresses, or wounding.</p>		

FOR THE PURPOSES OF INFORMATION ONLY

Codes used to identify States party to the PCT on the front pages of pamphlets publishing international applications under the PCT.

AL	Albania	ES	Spain	LS	Lesotho	SI	Slovenia
AM	Armenia	FI	Finland	LT	Lithuania	SK	Slovakia
AT	Austria	FR	France	LU	Luxembourg	SN	Senegal
AU	Australia	GA	Gabon	LV	Larvia	SZ	Swaziland
AZ	Azerbaijan	GB	United Kingdom	MC	Monaco	TD	Chad
BA	Bosnia and Herzegovina	GE	Georgia	MD	Republic of Moldova	TG	Togo
BB	Barbados	GH	Ghana	MG	Madagascar	TJ	Tajikistan
BE	Belgium	GN	Guinea	MK	The former Yugoslav Republic of Macedonia	TM	Turkmenistan
BF	Burkina Faso	GR	Greece			TR	Turkey
BG	Bulgaria	HU	Hungary	ML	Mali	TT	Trinidad and Tobago
BJ	Benin	IE	Ireland	MN	Mongolia	UA	Ukraine
BR	Brazil	IL	Israel	MR	Mauritania	UG	Uganda
BY	Belarus	IS	Iceland	MW	Malawi	US	United States of America
CA	Canada	IT	Italy	MX	Mexico	UZ	Uzbekistan
CF	Central African Republic	JP	Japan	NE	Niger	VN	Viet Nam
CG	Congo	KE	Kenya	NL	Netherlands	YU	Yugoslavia
CH	Switzerland	KG	Kyrgyzstan	NO	Norway	ZW	Zimbabwe
CI	Côte d'Ivoire	KP	Democratic People's Republic of Korea	NZ	New Zealand		
CM	Cameroon			PL	Poland		
CN	China	KR	Republic of Korea	PT	Portugal		
CU	Cuba	KZ	Kazakstan	RO	Romania		
CZ	Czech Republic	LC	Saint Lucia	RU	Russian Federation		
DE	Germany	LI	Liechtenstein	SD	Sudan		
DK	Denmark	LK	Sri Lanka	SE	Sweden		
EE	Estonia	LR	Liberia	SG	Singapore		